

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended): A method of generating a 3-dimensional effect comprising:

providing at least one first image layer of a chiral liquid crystal material, and at least one second image layer of a chiral liquid crystal material, wherein one of said first and second image layers reflects right-handed circularly polarised light and the other reflects left-handed circularly polarised light, and wherein

(a) said first and second image layers each comprise polymerised or crosslinked cholesteric liquid crystal material and are obtained by providing a polymerisable chiral liquid crystal material on a substrate, aligning said material into planar orientation and polymerising said material in its liquid crystal state at a temperature below 60°C, and/or or

(b) said first and second image layers are not directly superimposed onto each other and and/or do not form a stereo pair of images, or

(c) said first and second image layers each comprise polymerised or crosslinked cholesteric liquid crystal material and are obtained by providing a polymerisable chiral liquid crystal material on a substrate, aligning said material into planar orientation and polymerising said material in its liquid crystal state at a temperature below 60°C, and said first and second image layers are not directly superimposed onto each other and do not form a stereo pair of images.

2. (Original): A method according to claim 1, wherein said first and second image layers each comprise polymerised or crosslinked cholesteric liquid crystal material and are obtained by providing a polymerisable chiral liquid crystal material on a substrate, aligning said material into planar orientation and polymerising said material in its liquid crystal state at a temperature below 60°C.

3. (Original): A method according to claim 2, wherein the polymerisable chiral

liquid crystal material comprises at least one achiral polymerisable mesogenic compound and at least one chiral compound which, optionally, is polymerisable, mesogenic, or both.

4. (Original): A method according to claim 2, wherein said first and second image layers are obtainable by coating or printing a layer of polymerisable chiral liquid crystal material onto the same side or onto opposite sides of a substrate, orienting the material, polymerising the material and optionally removing the substrate from the polymerised layers.

5. (Original): A method according to claim 3, wherein said first and second image layers are obtainable by coating or printing a layer of polymerisable chiral liquid crystal material onto the same side or onto opposite sides of a substrate, orienting the material, polymerising the material and optionally removing the substrate from the polymerised layers.

6. (Original): A method according to claim 1, wherein said first and second image layers comprise encapsulated cholesteric liquid crystal material.

7. (Original): A method according to claim 1, wherein said first and second image layers comprise polymerised cholesteric liquid crystal material.

8. (Previously Presented): A method according to claim 1, wherein said first and second image layers reflect circularly polarised light of different wavelengths.

9. (Previously Presented): A method according to claim 1, wherein said first image layer is provided on a substrate and optionally covered by an intermediate layer, and said second image layer is provided on top of said first image layer.

10. (Original): A method according to claim 9, wherein said substrate comprises a light absorbing material.

11. (Currently Amended): An apparatus for generating a 3-dimensional effect comprising at least one first image layer of a chiral liquid crystal material and at least one second image layer of a chiral liquid crystal material, ~~as defined in claim 1 wherein one of said first and second image layers reflects right-handed circularly polarised light and the other reflects left-handed circularly polarised light, and wherein~~

(a) said first and second image layers each comprise polymerised or crosslinked cholesteric liquid crystal material and are obtained by providing a polymerisable chiral liquid crystal material on a substrate, aligning said material into planar orientation and polymerising said material in its liquid crystal state at a temperature below 60°C, or

(b) said first and second image layers are not directly superimposed onto each other and do not form a stereo pair of images, or

(c) said first and second image layers each comprise polymerised or crosslinked cholesteric liquid crystal material and are obtained by providing a polymerisable chiral liquid crystal material on a substrate, aligning said material into planar orientation and polymerising said material in its liquid crystal state at a temperature below 60°C, and said first and second image layers are not directly superimposed onto each other and do not form a stereo pair of images.

12. (Original): An apparatus according to claim 11, further comprising a means of detecting the 3-dimensional effect comprising a pair of films, foils, lenses or glasses, one of which transmits the right-handed circularly polarized light and the other transmits the left-handed polarized light reflected by said first and second image layers.

13. (Currently Amended): A 3-dimensional image generated by a method ~~or an apparatus according to claim 1.~~

14. (Cancelled):

15. (Currently Amended): A security or verification marking or device comprising an

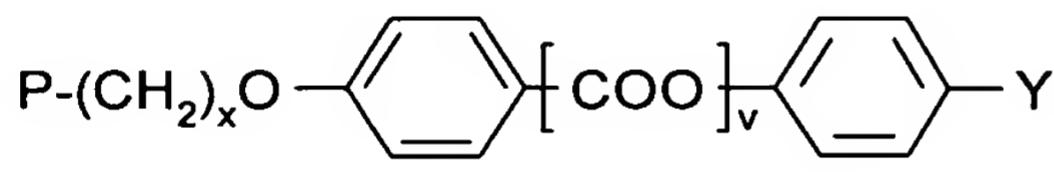
apparatus or image according to claim 11.

16. (Currently Amended): A security device comprising a printed area containing both enantiomeric forms of a chiral liquid crystal material that can be verified from large distances by viewing through a device made from two circular polarisers, one of which is left handed and the other is right handed.

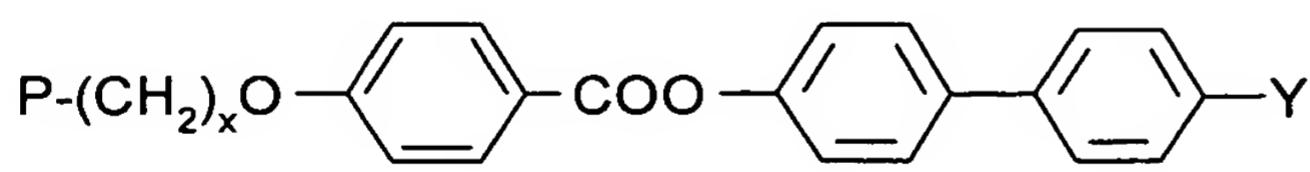
17. (Previously Presented): A document of value comprising a security or verification marking or device according to claim 15.

18. (New): A method according to claim 1, wherein said polymerisable chiral liquid crystal material comprises at least one monoreactive polymerisable mesogenic compound and at least one di- or multireactive polymerisable mesogenic compound.

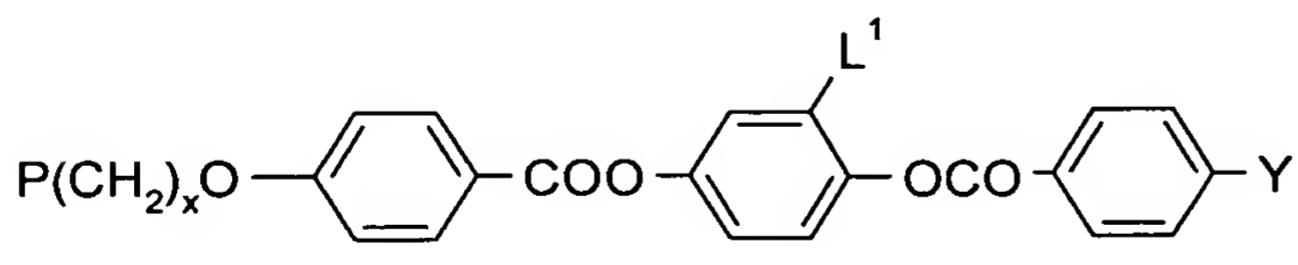
19. (New): A method according to claim 18, wherein said mono- and direactive polymerisable mesogenic compounds are selected from the following formula:



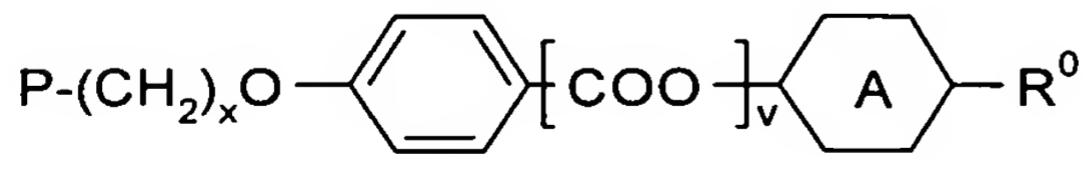
(Ia)



(Ib)

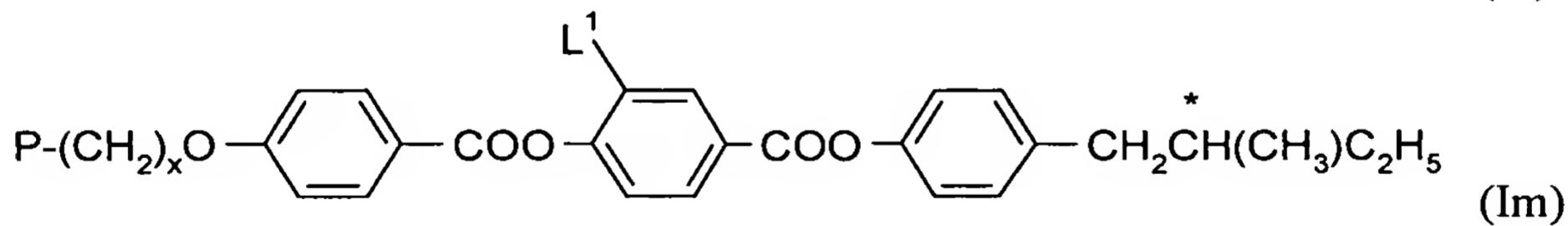
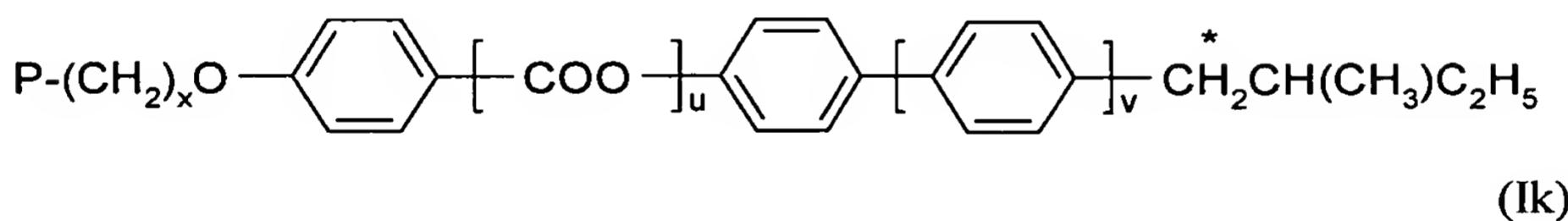
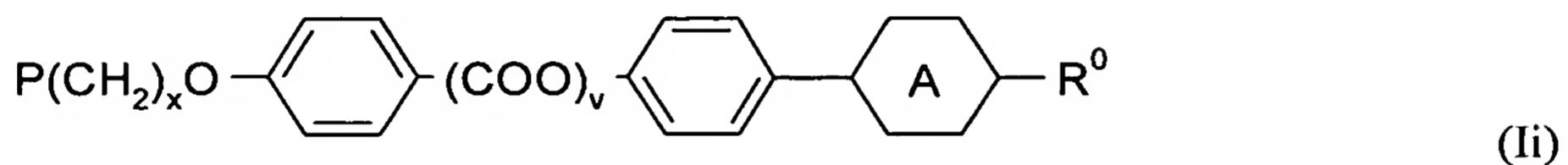
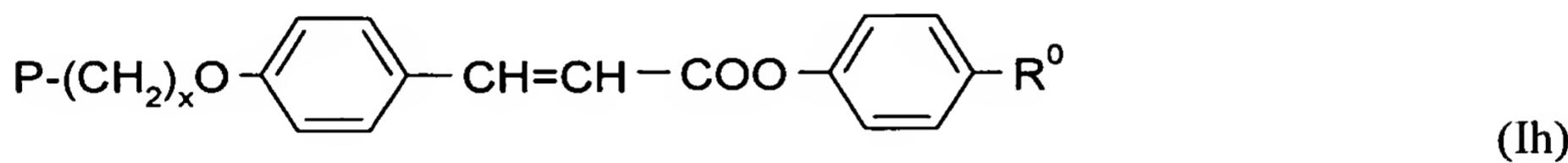
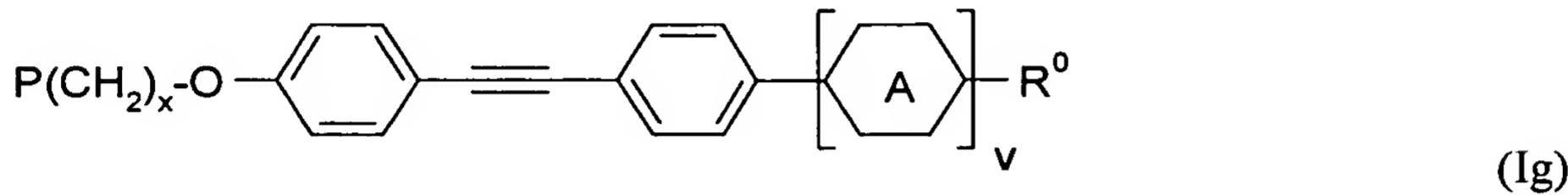
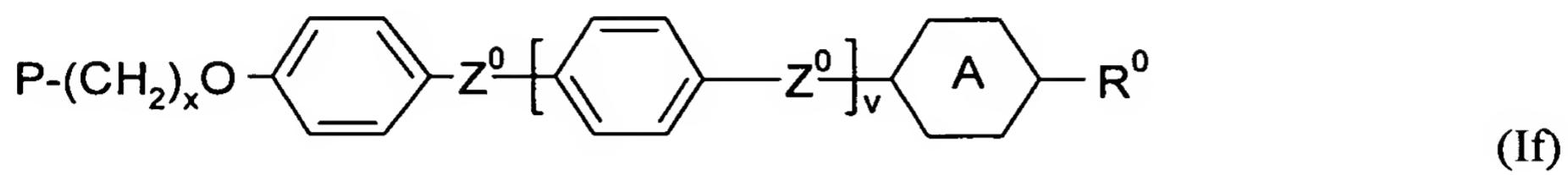
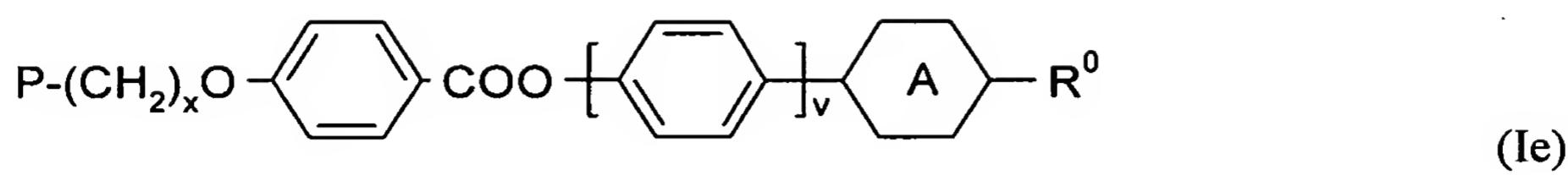


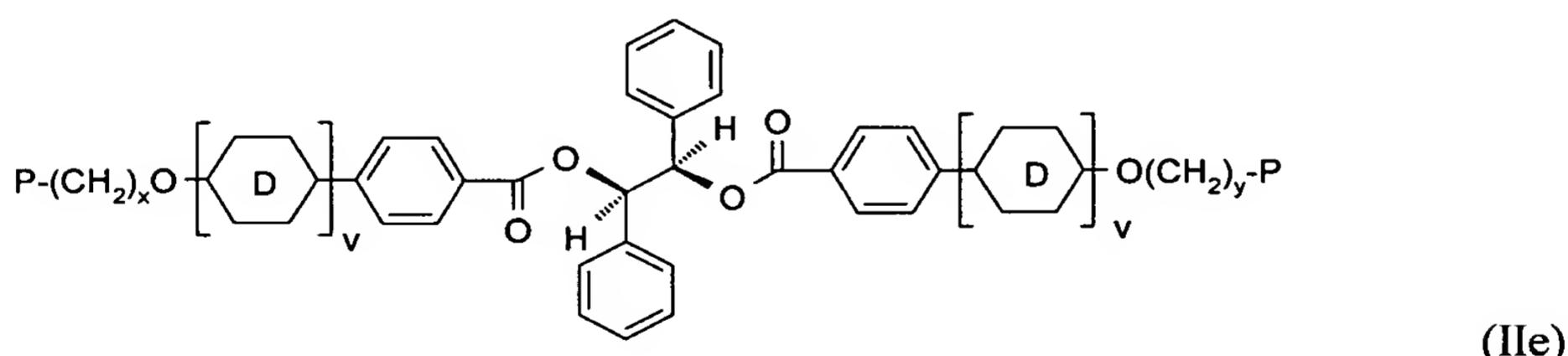
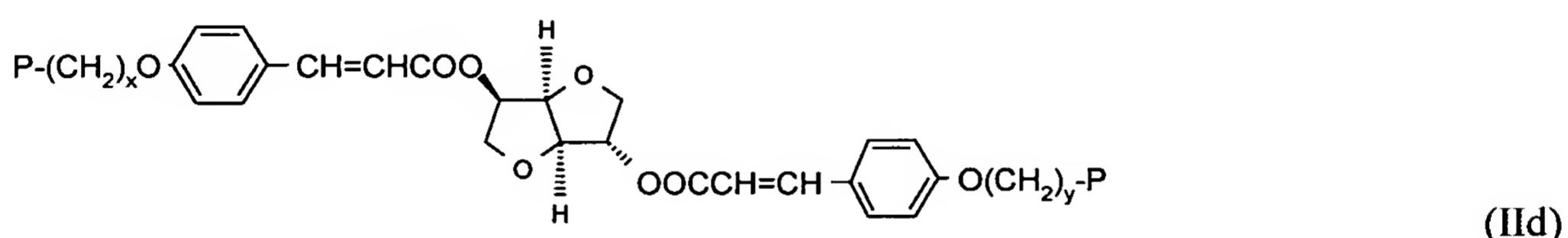
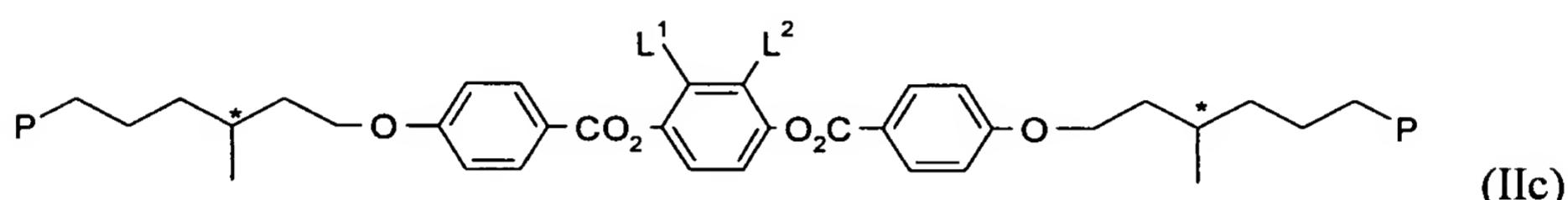
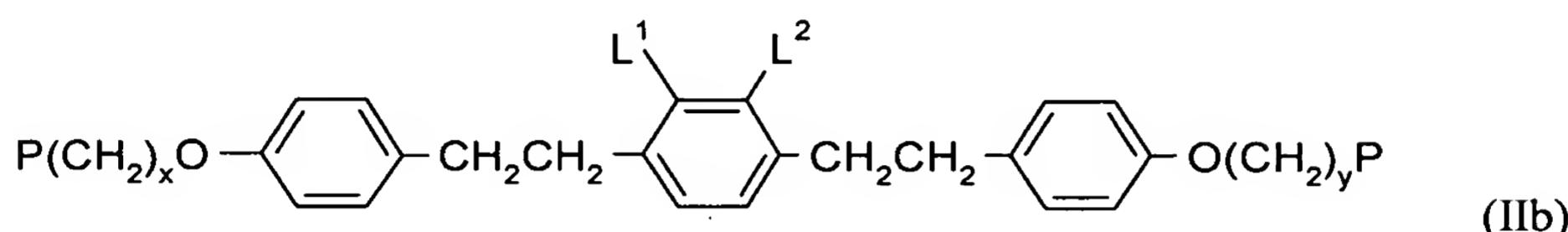
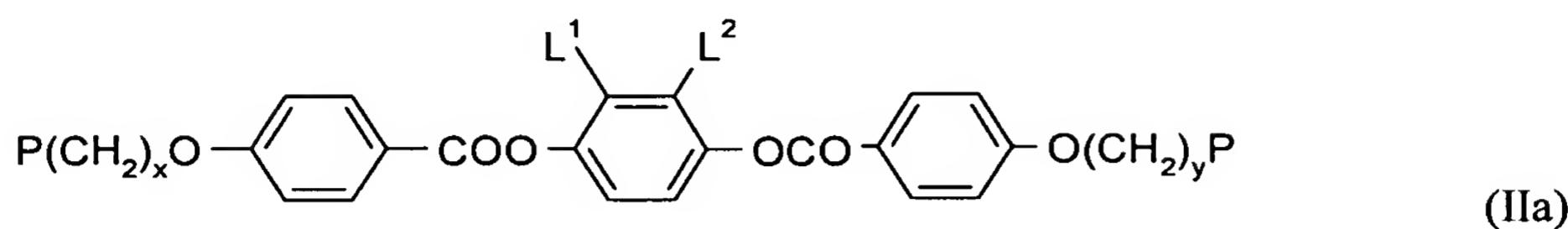
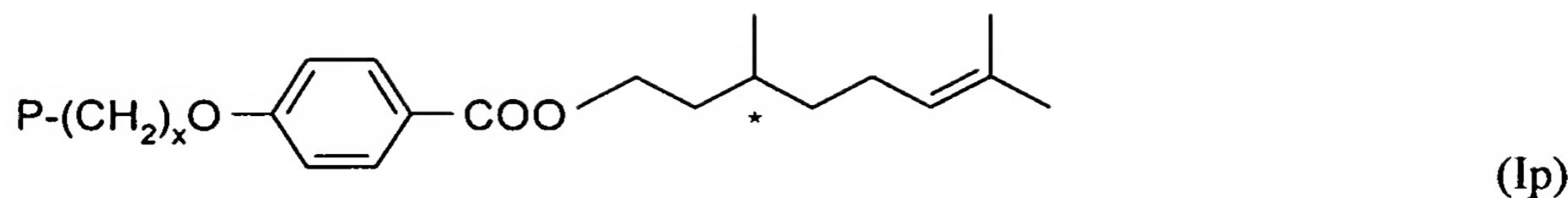
(Ic)



(Id)

MERCK-2708





wherein

P is a polymerisable group,

x and y are each independently 1 to 12,

A and D are each independently a 1,4-phenylene that is optionally mono-, di- or tri-substituted by L<sup>1</sup> or 1,4-cyclohexylene,

u and v are each independently 0 or 1,

Z<sup>0</sup> is -COO-, -OCO-, -CH<sub>2</sub>CH<sub>2</sub>- or a single bond,

**MERCK-2708**

**Y** is a group selected from F, Cl, CN, NO<sub>2</sub>, OH, OCH<sub>3</sub>, OCN, SCN, an optionally fluorinated carbonyl or carboxyl group with up to 4 C atoms or a mono-, oligo-, or polyfluorinated alkyl or alkoxy group with 1 to 4 C atoms,

**R<sup>0</sup>** is an unpolar alkyl with 1 to 12 C atoms or an alkoxy group with 2 to 12 C atoms,

**Ter** is a terpenoid radical,

**Chol** is a cholesteryl group, and

**L<sup>1</sup>** and **L<sup>2</sup>** are each independently H, F, Cl, CN, an optionally halogenated alkyl with 1 to 7 C atoms, an optionally halogenated alkoxy with up to 7 C atoms, an optionally halogenated alkylcarbonyl with up to 7 C atoms, an optionally halogenated alkoxycarbonyl with up to 7 C atoms or an optionally halogenated alkoxycarbonyloxy group with up to 7 C atoms.

20. (New): A method according to claim 1, wherein said polymerisable chiral liquid crystal material comprises one or more mono-, di- or multireactive achiral polymerisable mesogenic compounds and one or more chiral compounds which are optionally polymerisable and/or mesogenic.

21. (New): A method according to claim 1, wherein said polymerisable chiral liquid crystal material comprises

- a) one or more direactive achiral and/or direactive chiral mesogenic compounds, and
- b) one or more monoreactive achiral and/or monoreactive chiral mesogenic compounds,

wherein at least one of components a) and b) comprises a chiral compound.

22. (New): A method according to claim 1, wherein said polymerisable chiral liquid crystal material comprises

- a) one or more direactive achiral mesogenic compounds,
- b) one or more monoreactive achiral mesogenic compounds, and
- c) one or more non-polymerisable chiral compounds.

23. (New): A method according to claim 1, wherein said polymerisable chiral liquid crystal material comprises no di- or multireactive achiral mesogenic compounds and essentially

consists of monoreactive achiral mesogenic compounds and optionally contains non-polymerisable chiral compounds.

24. (New): A method according to claim 1, wherein said polymerisable chiral liquid crystal material comprises 1 - 50 % of di- or multireactive achiral mesogenic compounds, and 30 - 95 % of monoreactive achiral mesogenic compounds.

25. (New): A method according to claim 24, wherein said polymerisable chiral liquid crystal material further comprises 0.1 - 15 % of non-polymerisable chiral compounds.

26. (New): A method according to claim 19, wherein said monoreactive achiral compounds are selected from formulae Ia-Ig and II, and said direactive achiral compounds are selected from formulae IIa and IIb.

27. (New): A method according to claim 1, wherein said polymerisable chiral liquid crystal material contains no more than 15 % of non-polymerisable chiral compounds.